

# safety module, Harmony XPSU, Cat 4, potential free 2 NC, NO NC, 2 PNP, 24V AC or DC, screw

XPSUAF13AP

Product availability: Stock - Normally stocked in distribution facility

#### Main

Range of Product	Harmony Safety Automation			
Product or Component Type	Safety module			
Safety module name	XPSUAF			
Safety module application	Monitoring antivalent contacts			
	For emergency stop, guard and light curtain monitoring			
Function of module	Emergency stop button with 2 NC contacts			
	Guard monitoring with 1 or 2 limit switches			
	Monitoring 2 PNP sensors			
	Magnetic switch monitoring			
	Light curtain monitoring			
	RFID switch			
	Monitoring of electro-sensitive protection equipment (ESPE)			
	Proximity sensor monitoring			
Safety level	Can reach PL e/category 4 ISO 13849-1			
-	Can reach SILCL 3 IEC 62061			
	Can reach SIL 3 IEC 61508			
Safety reliability data	MTTFd > 30 years ISO 13849-1			
	Dcavg >= 99 % ISO 13849-1			
	PFHd = 1.13E-09 ISO 13849-1			
	HFT = 1 IEC 62061			
	PFHd = 1.13E-09 IEC 62061			
	SFF > 99% IEC 62061			
	HFT = 1 IEC 61508-1			
	PFHd = 1.13E-09 IEC 61508-1			
	SFF > 99% IEC 61508-1			
	Type = B IEC 61508-1			
Electrical circuit type	NC pair			
	PNP pair			
	Antivalent pair			
	OSSD pair			
Connections - terminals	Removable screw terminal block, 0.22.5 mm² solid or flexible			
	Removable screw terminal block, 0.252.5 mm² flexible with ferrule single conductor			
	Removable screw terminal block, 0.21.5 mm² solid or flexible twin conductor			
	Removable screw terminal block, 2 x 0.251 mm² flexible with ferrule without cable			
	end, with bezel			
	Removable screw terminal block, 2 x 0.51.5 mm² flexible with ferrule with cable			
	end, with bezel			
[Us] Rated Supply Voltage	24 V AC - 1510 %			
	24 V DC - 2020 %			

### Complementary

Synchronisation time between inputs	0.5 s 2 s 4 s			
Type of start	Automatic/manual/monitored			
Power consumption in W	2.0 W 24 V DC			

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Power consumption in VA	5.0 VA 24 V AC 50/60 Hz			
Input protection type	Internal, electronic			
safety outputs	3 NO			
safety inputs	2 safety input 24 V DC 5 mA			
maximum wire resistance	500 Ohm			
Input compatibility	Normally closed circuit ISO 14119 XC limit switch ISO 14119 Mechanical contact ISO 14119 Normally closed circuit ISO 13850 Antivalent pair ISO 14119 OSSD pair IEC 61496-1-2 3-wire proximity sensors PNP			
[le] rated operational current	5 A AC-1 for normally open relay contact 3 A AC-15 for normally open relay contact 5 A DC-1 for normally open relay contact 3 A DC-13 for normally open relay contact			
control outputs	3 on/off configurable pulsed output			
Input/output type	Semiconductor pulsed diagnostic output 24 V DC, 20 mA Z1, not safety-related			
[Ith] conventional free air thermal current	al 8A			
Associated fuse rating	10 A gG NO relay output circuit IEC 60947-1			
Minimum output current	10 mA relay output			
Minimum output voltage	15 V relay output			
Maximum response time on input open	20 ms			
[Ui] rated insulation voltage	250 V 2)IEC 60947-1			
[Uimp] rated impulse withstand voltage	4 kV II IEC 60947-1			
Local signalling	LED (green) for power ON LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S22			
Mounting Support	35 mm symmetrical DIN rail			
Depth	4.7 in (120 mm)			
Height	3.9 in (100 mm)			
Width	0.9 in (22.5 mm)			
Net Weight	0.441 lb(US) (0.200 kg)			

## **Environment**

Standards	IEC 60947-5-1 IEC 61508-1 functional safety standard IEC 61508-2 functional safety standard IEC 61508-3 functional safety standard IEC 61508-4 functional safety standard IEC 61508-5 functional safety standard IEC 61508-6 functional safety standard IEC 61508-7 functional safety standard IEC 61508-7 functional safety standard IEC 62061 functional safety standard
Product Certifications	TÜV cULus
IP degree of protection	IP20 terminals)IEC 60529 IP40 housing)IEC 60529 IP54 mounting area)IEC 60529

Ambient Air Temperature for Storage	-13185 °F (-2585 °C)	
Relative Humidity	595 % non-condensing	

# Ordering and shipping details

Category	US1SAF222477			
Discount Schedule	SAF2			
GTIN	3606489601614			
Returnability	Yes			
Country of origin	ID			

# **Packing Units**

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Unit Type of Package 1	PCE		
Nbr. of units in pkg.	1		
Package 1 Height	2.638 in (6.700 cm)		
Package 1 Width	5.394 in (13.700 cm)		
Package 1 Length	6.102 in (15.500 cm)		
Package weight(Lbs)	9.912 oz (281.000 g)		
Unit Type of Package 2	S03		
Number of Units in Package 2	16		
Package 2 Height	11.811 in (30.000 cm)		
Package 2 Width	11.811 in (30.000 cm)		
Package 2 Length	15.748 in (40.000 cm)		
Package 2 Weight	11.519 lb(US) (5.225 kg)		
Unit Type of Package 3	P06		
Number of Units in Package 3	128		
Package 3 Height	29.528 in (75.000 cm)		
Package 3 Width	23.622 in (60.000 cm)		
Package 3 Length	31.496 in (80.000 cm)		
Package 3 Weight	111.933 lb(US) (50.772 kg)		



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg CO2 eq, Total Life cycle)	70
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	152cf799-1df7-4892-81b4-4c890187f1d1
REACh Regulation	REACh Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
PVC free	Yes

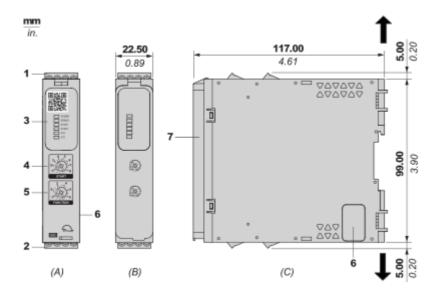
#### **Use Again**

○ Repack and remanufacture	
Recyclability potential, in %	0
Circularity Profile	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

#### **Dimensions Drawings**

#### **Dimensions**

#### Front and Side Views



(A): Product drawing

(B): Screw clamp terminal

(C): Side view

(1): Removable terminal blocks, top

(2): Removable terminal blocks, bottom

(3): LED indicators

(4): Start function selector

(5): Function selector

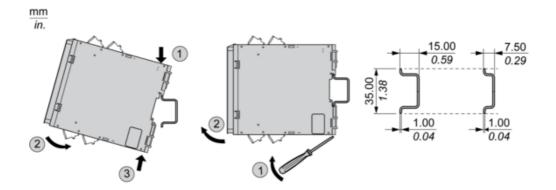
(6): Connector for optional output extension module (lateral)

(7): Sealable transparent cover

mm in.	7.0–8.0 0.28–0.31				<b>a</b>	- 80-
	mm²	0,2 2,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	24 12	2412	2416	2418	3 2016
		()c@m		Nm	0.5 0.6	
Ø 3,5 mm (0.14 in)				lb-in	4,4 5,3	

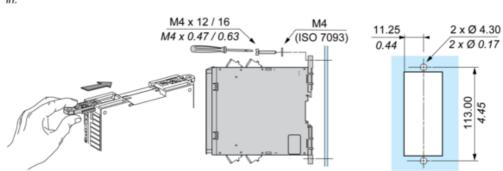
## Mounting and Clearance

### Mounting to DIN rail



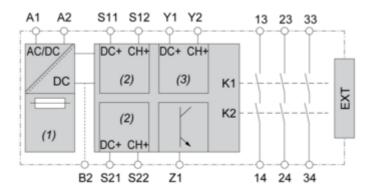
### **Screw-mounting**





#### Connections and Schema

#### **Wiring Drawing**



(1): A1-A2 (Power supply)

(2): S11-S12-S21-S22 (Single-channel safety input)

(3): Y1-Y2 (Start)

13-23-33-14-24-34 : Output

**EXT**: Connector for optional extension module

**B2**: Common ground terminal

Z1 : Pulsed output for diagnostics, not safety-related

Image of product / Alternate images

### **Alternative**

